



June 7, 2001
Project No. 97664V3

Ms. Brenda Pohlmann
Nevada Division of Environmental Protection
555 E. Washington, Suite 4300
Las Vegas, NV 89101-1049

RE: Results of monthly surface water sampling of the Las Vegas Wash at the Northshore Road Bridge.

PROVIDING

- Geotechnical Engineering
- Construction Materials Engineering
- Environmental Engineering
- Drilling Services

Dear Ms. Pohlmann:

Per your request, Geotechnical & Environmental Services, Inc. (GES) obtained a surface water sample from the Las Vegas wash on May 29, 2001 near the Northshore Road Bridge. We sent this sample, under chain-of-custody protocol, to NEL Laboratories (NEL) for laboratory analysis of perchlorate. NEL's analysis revealed a perchlorate concentration of 240 micrograms per Liter ($\mu\text{g/L}$). The NEL report is included with this letter, along with both a Perchlorate Summary Tables for 2000 and 2001.

Our services were performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable engineering firms in this or similar localities. No other warranty, either express or implied, is included or intended in this report. We appreciate this opportunity to provide our services. If you have any questions regarding these results, please feel free to call us at 365-1001.

Sincerely,
Geotechnical & Environmental Services, Inc.

Daniel C. Burns, C.E.M.*
#1692 (Expires 10/07/2001)
Project Manager

Gregory P. DeSart, P.E., C.E.M.
#1172 (Expires 12/22/2002)
President

"I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."

Enc: 2000 & 2001 Perchlorate Summary Tables
NEL Analytical Report

Dist: 1 faxed to addressee at 486-2863
1 original mailed to addressee
cc: fax to Jeff Gibson, American Pacific Corporation
cc: mail to Kevin Mayer, USEPA SFD 72, 75 Hawthorne Street, San Francisco, CA 94105
cc: to project file 97664V3

7150 Placid Street Las Vegas, NV 89119
(702) 365-1001 • Fax (702) 341-7120
www.gesnevada.com

**Las Vegas Wash at Northshore Road Bridge
2000 Summary of Perchlorate Concentrations**

Date Sampled	Perchlorate (µg/L)
1/27/00	569
2/28/00	720
3/29/00	870
4/27/00	750
5/30/00	740
6/28/00	410
7/27/00	650
8/28/00	510
9/27/00	430
10/26/00	340
11/29/00	370
12/26/00	320

**Las Vegas Wash at Northshore Road Bridge
2001 Summary of Perchlorate Concentrations**

Date Sampled	Perchlorate (µg/L)
1/25/01	280
2/27/01	350
3/27/01	480
4/26/01	320
5/29/01	240

NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division

4208 Arcata Way, Suite A • Las Vegas, Nevada 89030

702-657-1010 • Fax: 702-657-1577

1-888-368-3282

CLIENT: Geotechnical & Env. Serv.
7150 Placid
Las Vegas, NV 89119
ATTN: Dan Burns

PROJECT NAME: FPF/97664 V3
PROJECT NUMBER: 97664 V3

NEL ORDER ID: L0105271

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/29/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.


Stan Van Wagenen
Laboratory Manager

6/7/01
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF/97664 V3
PROJECT #: 97664 V3

CLIENT ID: North Shore Road Bridge
DATE SAMPLED: 5/29/01
NEL SAMPLE ID: L0105271-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	240	200.	50	EPA 314	µg/L	5/30/01
Total Dissolved Solids	1750	30.	2	SM 2540 C	mg/L	5/29/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

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CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF/97664 V3
PROJECT #: 97664 V3

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010529TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	5/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF/97664 V3
PROJECT #: 97664 V3

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010530CLO4-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	ND	4	1	EPA 314	µg/L	5/30/01

D.F. - Dilution Factor

ND - Not Detected

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Reno • Las Vegas • Boise
Phoenix • So. California

Las Vegas Division • 4208 Arcata Way, Ste. A • Las Vegas, NV 89030
702-657-1010 • Fax: 702-657-1577 • 888-368-3282

702-657-1010 • Fax: 702-657-1577 • 888-368-3282

NEEL Work Order:

16105271

Company: CEI Attention: D. Perry

Address:

7150 Placid Street, Las Vegas, NV 89119

Billing Address: 1702 369-1001 (702) 341-7120 Expected D:

Billing Address:	Expected Due Date
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Requested Turnaround: ☒ 5-day ☐ 2-day ☐ 1-day ☐ Other

Time/Date Sampled	Customer Sample Identification	N.E.L. Identification
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N.E.L.
Identificat

11/50/3/24/21	Robert's 3rd Road Bridge	21
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3	# of Containers
4	Matrix (Box #1)
5	Preservative (B)

✓ Perch launde
✓ TDS

Remarks

12000000

Custody Seal intact? Y N ~~(None)~~ Temp. 21

Condition when received (good

1000

Relinquished by (Print)	(Signature)

Date/Time

Received by (Print)

(Signature)

Date/Time

Box #1	DW - Drinking Water	SD - Solid
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OL - Oil/Organic Liquids

A - Air

Box #2

A. HCl
B. HNO_3
C. H_2SO_4
D. NaOH

E. Ice Only
F. Other _____
G. Not Preserved

The liability of NEL Laboratories Inc. is limited strictly to the price of sample analysis for those samples received in good condition by NEL. NEL is not responsible for loss, damage, resampling costs and/or qualified data related to samples not received in good condition, including adequate sample volume and number of containers. Customer signature of this CoC constitutes a purchase order for NEL to perform work and constitutes acceptance of all NEL Standard Terms and Conditions. Signature also constitutes acceptance of NEL Standard List Prices for all services ordered here on, except those specified otherwise via an NEL Quotation for Testing Services in effect at the time of sample receipt. NEL turnaround times are measured in regular working days. Samples received at the laboratory after 16:30 will be considered received on the next working day. Commitment of laboratory to the requested turnaround time will be confirmed via Sample Confirmation transmitted to the fax number provided above.

LETTER OF TRANSMITTAL

GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.

7150 Placid Street
Las Vegas, Nevada 89119
(702) 365-1001 (702) 341-7120 (FAX)

TO: Nevada Division of Environmental Date: June 8, 2001
Protection
555 East Washington Ste 4300 PROJECT: Northshore Road Bridge
Las Vegas, Nevada 89101
ATTN: Ms. Brenda Pohlmann GES PROJECT # 97664V3

WE ARE FORWARDING THE ITEMS LISTED BELOW VIA:

 MESSENGER PICK UP X U.S. MAIL "NEXT DAY"

COPIES	DESCRIPTION
<u>1</u>	<u>Results of monthly surface water sampling of the Las Vegas Wash at the Northshore</u> <u>Road Bridge.</u>
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THESE ITEMS ARE SENT FOR: REVIEW COMMENT APPROVAL USE
 SIGN & RETURN OTHER:

REMARKS:

THIS MATERIAL IS SENT BY: Daniel C. Burns, C.E.M.
PLEASE SIGN AND RETURN ONE COPY OF TRANSMITTAL.

RECEIVED BY: TIME: DATE:

OTHER DISTRIBUTION:

If enclosures are not as noted, please notify us at once.